

NOTES ON LANGUAGE IN DRAFT PERMIT OUTLINES

The three sections of the draft permit outline are meant to cover all types of trading, with the unique requirements of each type of trading highlighted with the text in italics. The language in the outline addresses the major elements of effluent trading only. It is not meant to address all conditions that may be incorporated in the final permit to allow effluent trading. More detailed language will be developed as the effluent trading project is finalized.

- < *PS-PS downstream trades*, in which a point source discharger is buying phosphorus credits from another point source discharger located on the same river, and downstream of its facility;
- < *PS-PS upstream trades*, in which a point source discharger is buying phosphorus credits from another point source discharger located on the same river, and upstream of its facility; and
- < *PS-NPS trades*.

Localized Impacts

Trading has the potential to cause water quality impacts in the areas where trading occurs. The ratios that have been developed are only designed to address the net impact at Parma of a trade between sources elsewhere in the watershed. The ratios do not, however, address a trade's potential net impact at any other point in the river. Prior to allowing any trading within the context of a permit, an analysis of the watershed needs to be completed that will ensure that specific trades do not degrade water quality within the area of the trade, taking into account the effects of shifting phosphorous loading to different points in the watershed and the interaction between phosphorous and other environmental factors.

The potential for localized impacts is least when the reducer is upstream of the increaser. However, when there are diversions below the upstream source and above the downstream source, the full benefit of the upstream source's decrease may not be felt in the river until some distance below the downstream source, when the irrigation return flows reenter the river. This could result in net phosphorous increases in the river below the downstream source and above the return flow. A mechanism would need to be developed to avoid any such trades that may cause exceedances of water quality standards.

If the increaser is upstream of a decreaser, there would be an expected net increase in phosphorous loadings in the stretch of the river between the two sources. The localized impacts analysis will have to ensure that the ambient water located between the increaser and the decreaser will not be adversely impacted by the increase in load.

If two sources are not both on the main stem or on the same tributary, then there is an additional factor

that needs to be considered. There would be a net increase in phosphorous loading in the stretch immediately downstream of the increaser, before the tributary joins the main stem (or the two tributaries meet).

Presumably, analysis done in connection with the Lower Boise River TMDL will provide a basis to adequately address these issues, and provisions could be incorporated in the permit accordingly.

Water Quality Requirements in NPDES Permits

The Clean Water Act and the associated regulations impose certain requirements on NPDES permits and compliance schedules in connection with water quality standards. For example, the permitting statutory and regulatory provisions require that a reasonable potential analysis be performed, and that numeric permit limits be imposed that will prevent the source from causing or contributing to exceedances of water quality standards, within a certain timeframe specified by regulation. The permitting requirements may be more stringent than the conditions contained in an approved TMDL, but nonetheless would apply to any permits issued to point sources. Some issues that could arise include the establishment of a numeric target for phosphorous interpreting the narrative criterion, and an analysis of the effects of total vs. dissolved phosphorous.

Variable Effluent Limits

The model language lets a permittee increase or decrease its effluent limit subject to the credits that it purchases or sells, without going through the permit modification procedures. This approach will only be viable under certain conditions. The procedural and substantive trading requirements contained in the TMDL, permit, and other documents, would need to be adequate to ensure the protection of water quality standards in the Brownlee Reservoir and in the Lower Boise River and its tributaries. At the same time, the requirements would need to be simple enough to be well understood by the public when those documents are issued.

Credit Amount from Measured NPS Reductions

A critical assumption underlying the viability of PS-NPS trading is that the NPS reductions can be reliably quantified as a prerequisite to a PS increasing its discharge on account of that NPS reduction. The above language assumes that monitoring methods will be developed that measure NPS phosphorous reductions with the same reliability as methods currently required of NPDES sources for monitoring their own phosphorous discharges. The frequency of sampling needed to achieve the same confidence interval is still to be established for each BMP project, as well as the appropriate quality assurance and quality control procedure to be followed for the specified sampling methods. The

prescribed monitoring methods will also need to take in account the factors for each BMP project that can affect the accuracy of the measurement method, such as the ability to measure flow volumes over land surfaces and the potential for leakage to groundwater.

Credit Amounts from Calculated NPS Reductions

For those BMPs for which it is not feasible or cost-effective to measure the reductions, the above approach assumes that a practical and scientifically credible means will be devised to determine the amount of reduction from a given BMP, and to compare it to the reduction called for by the TMDL.

Third Party BMP Site Reviews

EPA has the authority to inspect point sources, but does not have that authority for nonpoint sources. Since trading will allow a PS to increase phosphorous discharges on account of a NPS decrease, we need to achieve consensus on a means of verifying NPS reductions with enough certainty to justify allowing a PS to increase its discharge on account of that reduction.

The Soil Conservation Commission has offered to assist EPA and DEQ in their audit of NPDES sources by providing information from its routine project reviews and being available to conduct special on-site reviews of the BMPs used to generate the purchased credits to ensure that the monitoring methods prescribed in the BMP list have been installed and implemented properly. EPA, SCC and DEQ will negotiate a Memorandum of Understanding to identify the roles of each of the three agencies to undertake this trading requirement.

Determining the Tradable Portion of NPS Reductions

The above approach assumes that a method will be devised to determine how much of a NPS's reduction is necessary to meet the TMDL load reduction target, and how much is in excess of that and therefore eligible to generate a transferrable credit. This will need to be implemented through a mechanism incorporated in the TMDL and the permits. That mechanism will also have to satisfy the requirements as to simplicity and clarity as discussed in the comment regarding the variable limits approach.

Ratios for Non-point Sources

The above language assumes that the drainage delivery ratios and site location factors will be developed for each non-point source that engages in trading.

Trade Tracking Mechanism

The establishment of a centralized trade tracking system is essential for determining the validity of a trade, since the PS will be required to provide a DMR with a monthly trade summary of all trades. The trade tracking system must ensure that there is no duplicative ownership of credits. DEQ is responsible for auditing the trade tracking system if it is developed by a third party, or to develop the system itself to perform these tasks.

Credit Transfer Deadline

Although the above language specifies a deadline for filing a DMR for a given month, it does not specify the deadline by which a trade must be completed in order for it to be included in a given month's DMR. That deadline still must be determined.

PS Monitoring Requirements

Ambient and effluent monitoring requirements for flow and phosphorus (and possibly other parameters) will be included in all permits. Frequency of monitoring will be determined at a later date.

Other Key Issues

The above language also assumes that we will resolve other key issues, some of which may require changes to this language. Examples are an adequate process associated with the elements of the program that are intended to be embodied in documents outside of the permit, Paperwork Reduction Act questions associated with the new reporting forms we are creating, and the audit plan for the trade tracking system.